

REMARKS

Reconsideration of this application is requested.

Claim 21 has been canceled in response to the Examiner's rejection thereof in ¶ 1, page 2 of the action. Reconsideration of the Section 112, 2nd ¶ rejection of claim 21 is, therefore, requested.

A new title and headings have been presented as required by the Examiner. Headings have been included, in some instances, where they were not applicable, as the Examiner proposed. However, it seemed inappropriate to include headings referencing drawings and sequence listing in view of the nature of the invention.

The Examiner is requested to reconsider and withdraw the rejection/objection to the specification as set out in ¶s 3-4, pages 2-3 of the action, in view of the foregoing changes in the claims and specification.

The Examiner's Section 102(b) rejection of claim 21 (¶ 6, pages 6-7 of the action) has been mooted by the indicated cancellation of this claim.

The Examiner is respectfully requested to reconsider the Section 103(a) rejection of claims 1-20 as unpatentable over Hopper et al. (U.S. 7,314,573) in view of Schemenaur et al. (U.S. 6,444,140). The references do not make the applicants' invention obvious. For one thing, the Hopper et al. patent is not a reference against the applicants for reasons noted below. The Examiner's reference combination fails on this ground alone. Furthermore, even if Hopper et al. could qualify as citable prior art, there is no valid reason to consider Hopper et al. with Schemenaur et al. in view of the fundamental differences between these disclosures. Furthermore, even if the references are combined as the Examiner has proposed, the applicants' invention does not result as the references are missing essential features of the applicants' invention.

In more detail, it is noted initially that the Hopper et al. patent is only citable against the applicants under Section 102(e). In particular, the patent has a PCT filing date of August 22, 2003 and was not published until April 1, 2004 while the applicants' PCT application was filed on October 1, 2004, i.e. less than a year after the publication date of the Hopper et al. PCT filing, and is based on a UK filing on October 25, 2003. Thus, as noted, Hopper et al. can only qualify as prior art under Section 102(e). However, at the time the present invention was made, the applicants were under an obligation to assign the invention to the same assignee as Hopper et al. (Fujifilm Imaging

Colorants Limited or its predecessor Avecia Inkjet Limited). See, for example, the Collier declarations filed herein on January 15, 2007 and April 18, 2007. Accordingly, the Hopper et al. patent is disqualified as prior art against the applicants under Section 103(c).

The applicants respectfully submit that the foregoing should be sufficient to warrant withdrawal of the Examiner's Section 103 rejection of claims 1-20 and warrant allowance of these claims. However, there are further reasons why the applicants' claims define subject matter that is unobvious from the Examiner's references even if Hopper et al. could be relied on as applicable prior art.

More specifically, it is noted that the Examiner is of the view that Hopper et al. disclose all the features of applicants' main claim 1 with the exception of metal chelating groups and that this feature is found in Schemenaur. However, with respect, the applicants disagree with the Examiner's view.

More specifically, claim 1, and all of the applicants' other claims because of their dependence on claim 1, require a hot melt etch-resist ink and solidification of the ink by cooling. Hopper et al. do not disclose hot melt inks. To the contrary Hopper et al. relate exclusively to acrylate functional inks (see Hopper et al. claim 1).

Additionally, Hopper et al. do not disclose solidification by cooling. To the contrary Hopper et al. (see claim 1) disclose only inks which are polymerized (solidified) by actinic and/or particle beam radiation.

The features of hot melt and solidification by cooling, which are essential features of the applicants' invention, are not found in either of the references relied on by the Examiner. Accordingly, even if the references are combined as the Examiner has proposed, the applicants' invention would still not be obtained. With respect, it is submitted that the Examiner's Section 103 rejection fails on this ground as well.

Furthermore, there is no valid basis in the art to even consider combining Hopper et al. and Schemenaur et al. as the Examiner has proposed. These references are concerned with two different types of situations. Thus, Hopper et al. require non-aqueous inks as an essential feature while Schemenaur et al. require aqueous inks. These are not interchangeable features. Furthermore, Hopper et al. relate to ink jet

printing of the etch resist ink while Schemenaur, in contrast, does not mention ink jet printing. Also in Schemenaur, it is the etchant solution not the etch resist ink which contains a metal chelate group.

It is also clear from Schemenaur (see Col. 3, lines 13 to 25) that micro-etching is really a surface treatment to aid bonding and not substantial removal of the metal or alloy as per Hopper et al. All of these differences between the Examiner's two references show that the Examiner's proposed combination is not warranted. This is highlighted even more by the fact that the sulphuric acid and hydrogen peroxide components used in the etchant formulations of Schemenaur would be entirely unsuitable for ink jet printers as one would expect the printer to fail due to corrosion not long after use.

For all of the reasons noted above, the applicants submit that the Examiner's Section 103(a) rejection of claims 1-20 is not warranted and should be withdrawn, with allowance of the application.

Favorable action is requested.

Respectfully submitted,

MORGAN LEWIS & BOCKIUS LLP

By 
Paul N. Kokulis
Reg. No. 16773

Date: December 1, 2009

Customer No. 09629

1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-3000
Facsimile: (202) 739-3001
Direct: (202) 739-5455